

WHAT IS CLAIMED IS:

1. An image display device, comprising:

an image display section for displaying an image in accordance with an input of a chrominance signal; and

a chrominance signal converter for converting the chrominance signal to be inputted into the image display section, in accordance with light characteristics of external light that strikes onto the image display section.

2. An image display device as set forth in Claim 1, further comprising:

a sensor for sensing the light characteristics of the external light,

wherein the chrominance signal converter converts the chrominance signal into a chrominance signal of a color suitable for an output of the sensor.

3. The image display device as set forth in Claim 2, wherein:

the chrominance signal converter includes a target display color setting section for setting a color to display as an image agreeable with chromatic adaptation characteristics of human, according to the output of

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the sensor, the chrominance signal converter converting the chrominance signal into a chrominance signal of a target display color that has been set by the target display color setting section.

4. The image display device as set forth in Claim 2, wherein:

the chrominance signal converter includes a color reproduction section for reproducing a color to display as an image agreeable with chromatic adaptation characteristics of human by using three primary colors having chromaticities suitable for the output of the sensor, the chrominance signal converter converting the chrominance signal into a chrominance signal of a color reproduced by the color reproduction section.

5. The image display device as set forth in Claim 2, wherein:

the chrominance signal converter includes (1) a target display color setting section for setting a color to display as an image agreeable with chromatic adaptation characteristics of human, according to the output of the sensor, and (2) a color reproduction section for reproducing a target display color that has been set by the target display color setting section,

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by using three primary colors having chromaticities suitable for the output of the sensor, the chrominance signal converter converting the chrominance signal into a chrominance signal of a target display color reproduced by the color reproduction section.

6. The image display device as set forth in Claim 2, wherein:

the chrominance signal converter includes (1) a color correction coefficient generator for generating color correction coefficient, in accordance with the output of the sensor, and (2) color correction section for correcting the chrominance signal by using the color correction coefficient generated by the color correction coefficient generator.

7. The image display device as set forth in Claim 6, wherein:

the color correction coefficient generator includes (1) a target display color setting coefficient generator for generating a target display color setting coefficient as a first color correction coefficient used for setting a target display color, and (2) a color reproduction coefficient generator for generating a color reproduction coefficient as a second color

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correction coefficient used for color reproduction, based on the output of the sensor, and

the color correction section includes (1) a multiplier for calculating a product of (a) the target display color setting coefficient generated by the target display color setting coefficient generator, and (b) the color reproduction coefficient generated by the color reproduction coefficient generator, and (2) a target display color correction section for performing color correction of a chrominance signal, based on a value obtained by the multiplier.

8. The image display device as set forth in Claim 2, wherein:

the sensor has a function to resolve wavelength characteristics into at least two different types of wavelength regions, and measures wavelength characteristics of the external light, based on output values in the respective wavelength regions.

9. An image display device as set forth in Claim 1, further comprising:

a memory for storing in advance the light characteristics of a plurality of types of the external light,

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wherein the chrominance signal converter converts the chrominance signal into a chrominance signal of a color suitable for the light characteristics of the external light that are selected and read out from the memory.

10. The image display device as set forth in Claim 9, wherein:

the memory stores wavelength characteristics of more than two types of wavelength regions of the external light, and outputs the wavelength characteristics as the selected light characteristics of the external light, in accordance with a combination of the stored wavelength characteristics.

11. The image display device as set forth in Claim 9, wherein:

the chrominance signal converter includes a target display color setting section for setting a color to display as an image agreeable with chromatic adaptation characteristics of human, based on the light characteristics of the external light selected from the memory, the chrominance signal converter converting the chrominance signal into a chrominance signal of a target display color that has been set by the target

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display color setting section.

12. The image display device as set forth in Claim 9, wherein:

the chrominance signal converter includes a color reproduction section for reproducing a color to display as an image agreeable with chromatic adaptation characteristics of human, by using three primary colors having chromaticities suitable for the light characteristics of the external light selected from the memory, the chrominance signal converter converting the chrominance signal into a chrominance signal of a color reproduced by the color reproduction section.

13. The image display device as set forth in Claim 9, wherein:

the chrominance signal converter includes (1) a target display color setting section for setting a color to display as an image agreeable with chromatic adaptation characteristics of human, based on the light characteristics of the external light selected from the memory, and (2) a color reproduction section for reproducing a target display color that has been set by the target display color setting section, by using

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three primary colors having chromaticities suitable for the output of the memory, the chrominance signal converter converting the chrominance signal into a chrominance signal of the target display color reproduced by the color reproduction section.

14. An image display device as set forth in Claim 9, further comprising:

a sensor for sensing the light characteristics of the external light,

wherein the chrominance signal converter selectively performs (1) conversion of a chrominance signal based on an output of the sensor, or (2) conversion of a chrominance signal based on the light characteristics of the external light selected from the memory.

15. The image display device as set forth in Claim 14, wherein:

the chrominance signal converter performs the conversion of the chrominance signal based on the light characteristics of the external light selected from the memory, when an illuminance output, which is one of types of the outputs of the sensor, exceeds a certain value.

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16. The image display device as set forth in Claim 9, wherein:

the memory stores in advance a plurality of types of characteristics of the external light and a plurality of color correction coefficients that vary depending on the light characteristics of the external light; and

the chrominance signal converter includes (1) a color correction coefficient generator for reading out a color correction coefficient stored in the memory, based on the selected light characteristics of the external light, and (2) a color correction section for correcting the chrominance signal by using the color correction coefficient that is read out from the memory by the color correction coefficient generator.

17. An electronic apparatus, which has an image display device, comprising:

an image display section for displaying an image in accordance with an input of a chrominance signal; and

a chrominance signal converter for converting the chrominance signal to be inputted into the image display section, in accordance with light characteristics of external light that strikes onto the

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image display section.

18. An image display method comprising step of converting a chrominance signal to be inputted into an image display section, in accordance with light characteristics of external light that strikes onto the image display section that displays an image in accordance with an input of a chrominance signal.

19. The image display method as set forth in Claim 18, wherein the chrominance signal is converted into a chrominance signal of a color suitable for the light characteristics of the external light that are detected by a sensor.

20. The image display method as set forth in Claim 18, wherein the chrominance signal is converted into a chrominance signal of a color suitable for the light characteristics of the external light that are selected and read out from among light characteristics of a plurality of types of external light, which are stored in a memory in advance.

21. The image display method as set forth in Claim 19, wherein the conversion of the chrominance signal is

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carried out based on a color to display, which has been set according to the light characteristics of the external light and in consideration of color adaptation characteristics of human.

22. The image display method as set forth in Claim 19, wherein the conversion of the chrominance signal is carried out based on a color reproduced by using three primary colors having chromaticities suitable for the light characteristics of the external light.

23. The image display method as set forth in Claim 19, wherein the conversion of the chrominance signal is carried out base on a reproduced color that is a color, according to the light characteristics of the external light, set as an image agreeable with chromatic adaptation characteristics of human, and reproduced by using three primary colors having chromaticities suitable for the light characteristics of the external light.

24. The image display method as set forth in Claim 20, wherein the conversion of the chrominance signal is carried out based on a color to display, which is set according to the light characteristics of the external

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light and in consideration of color adaptation characteristics of human.

25. The image display method as set forth in Claim 20, wherein the conversion of the chrominance signal is carried out based on a color reproduced by using three primary colors having chromaticities suitable for the light characteristics of the external light.

26. The image display method as set forth in Claim 20, wherein a color is set, according to the light characteristics of the external light, as an image agreeable with chromatic adaptation characteristics of human, the color is reproduced by using three primary colors having chromaticities suitable for the light characteristics of the external light, and the conversion of the chrominance signal is carried out based on the reproduced color.

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